



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

230 SOUTH DEARBORN ST.

CHICAGO, ILLINOIS 60604

JUL 26 1983

REPLY TO THE ATTENTION OF

SUBJECT: Remedial Work at Waukegan Harbor Site - OMC
NPDES Discharge Limits

FROM: Rodger C. Field
Associate Regional Counsel

TO: File

In connection with implementation of the proposed remedy at the Waukegan Harbor Hazardous Waste Site, the Agency has considered the effect of the construction-related work required by the Consent Decree on effluent discharge from certain outfalls governed by the present NPDES Permit (ILL. Permit 000 2267) of Outboard Marine Corporation (OMC). The Agency has determined that implementation of the required Remedial Action will have impact on the following outfalls.

1. Outfalls 001 and 006 discharge non-contact cooling water taken from intake HI 1 (which is located in the Upper Harbor). These outfalls return the cooling water to the Upper Harbor.

2. Outfalls 007 and 014 discharge primarily non-contact cooling water (with some amount of storm water) received from intake HI 2, currently located in Slip 3 and to be relocated to new Slip No. 4. Outfall 007 currently discharges into Lake Michigan, and Outfall 014 discharges into the North Ditch tributary to Lake Michigan.

3. Outfalls 015 and 016 are storm water and roofwater outfalls that discharge into the North Ditch tributary to Lake Michigan.

The State of Illinois is authorized to implement the NPDES program pursuant to 33 U.S.C. §1251 et seq. (The Clean Water Act). In determining effluent standards, Illinois law adopts the standards set forth in Sections 301 and 302 of The Clean Water Act, See Section 309.141 of the Rules of the Illinois Pollution Control Board promulgated under the Illinois Environmental Protection Act. These requirements include, for conventional pollutants, application of the best conventional pollution control technology (BCT), and for toxic pollutants, the best available technology economically achievable (BAT).

Section 121(e), as they are to either the Upper Harbor which is part of the Site or to Lake Michigan which is immediately adjacent to the Site. Section 121(e) has been interpreted to mean that the remedy must comply with the substantive requirements of other laws, but not procedural requirements.

The Illinois Environmental Protection Act and regulations promulgated thereunder (Section 309.182) as well as federal law (40 CFR §122.62(a)(1)) provide for modification of permits as a result of changed circumstances. As set forth above, both IEPA and U.S. EPA have determined that modification of the current limits is appropriate as a result of construction-related activity. Accordingly, by exercise of Best Professional Judgment, the limitations and conditions as set forth in Table I are considered appropriate. As mentioned above, it is necessary to meet the substantive requirements of the NPDES permit program but it is not necessary to satisfy procedural requirements (such as the procedural requirement for permit modification). Since the standards in Table I satisfy the substantive requirements, they are incorporated into the Decree.

Finally, in determining the interim limits in Table I, U.S. EPA and IEPA especially considered reduction of PCB loadings to Lake Michigan to the maximum extent possible. Therefore, a distinction was made between outfalls 001 and 006 and Outfalls 007 and 014. The latter Outfalls discharge directly to Lake Michigan whereas the former return cooling water to the Upper Harbor. In addition, the Agencies mandated appropriate measures to minimize the impact of construction-related activities. These include: roof-washing to reduce contamination of rainwater run-off; dust suppression measures during construction; use of alternative water supply during construction; addition of coagulants to accelerate settling of resuspended sediments and submission of a Best Management Practices Plan to specify additional corrective measures.

A map showing the location of these outfalls is in Attachment 1. The flows associated with the outfalls are presented in Table 1 along with current NPDES and modified NPDES limits for polychlorinated biphenyls (PCB's) and Total Suspended Solids (TSS).

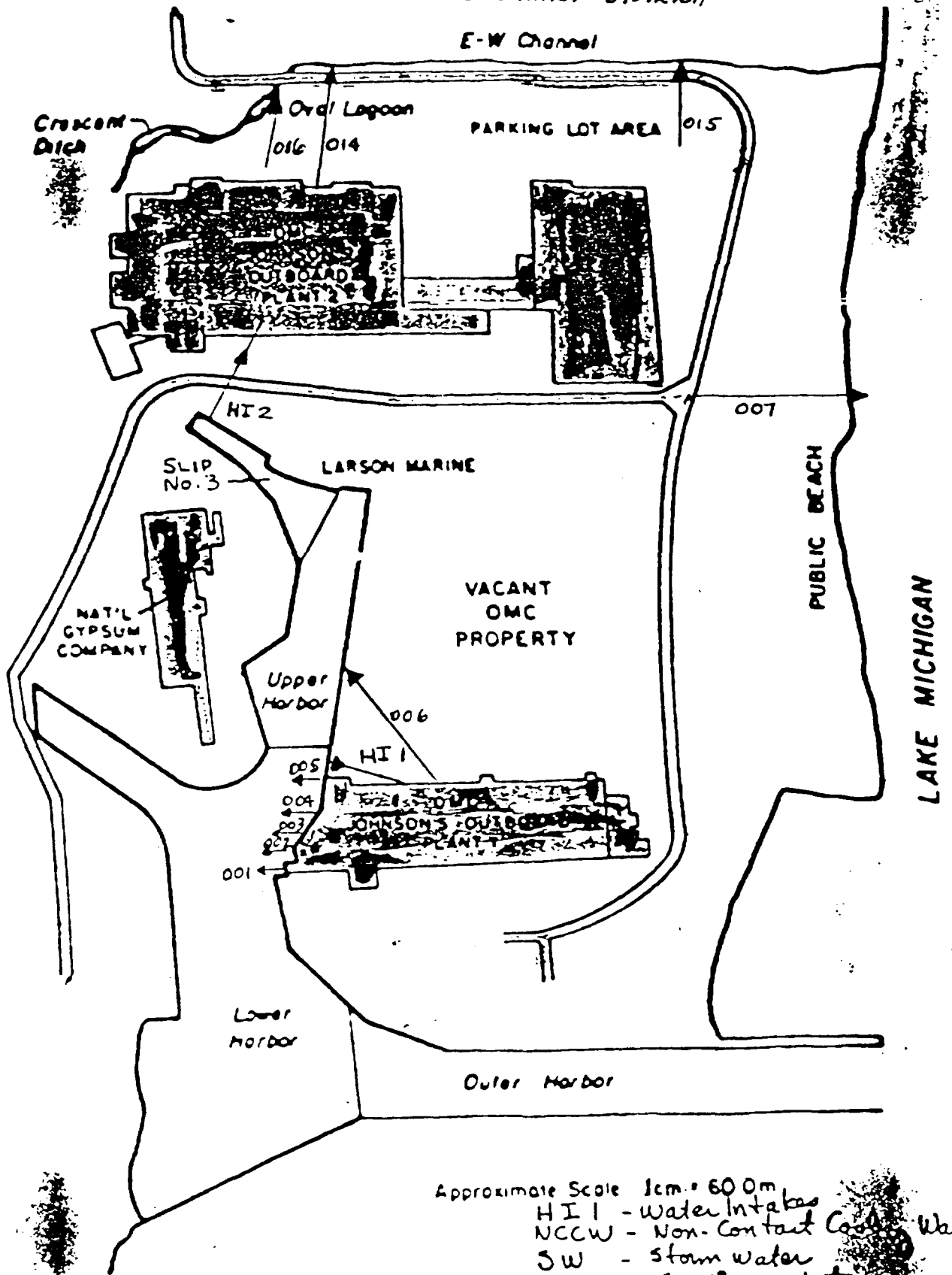
As shown in Table 1, the effective PCB limitation under the current permit is an interim limit of 1 part per billion (ppb). The limit was set considering available technology and reasonable progress toward compliance with the Ambient Water Quality Criteria for PCB in Lake Michigan. Best Professional Judgment was used in selecting 1 ppb as the limit OMC could currently reach.

Both U.S. EPA and IEPA agree that the proposed remedial activities will affect the present NPDES permit for two reasons. First, fugitive dust from construction activities will be generated. PCB's can adhere to dust particles. These potentially contaminated dust particles could lodge in roof and yard areas where runoff water is collected and discharge to the storm water and roofwater outfalls. This may result temporarily in elevated PCB and TSS concentrations above those currently specified in the NPDES permit. Second, dredging in the Upper Harbor will cause some resuspension of solids in the harbor and elevated PCB concentrations in the water column. Although the company will not be using the Harbor intakes (HI 1 and HI 2) during dredging, it may take some time before the elevated PCB concentrations in the harbor decrease. Small amounts of resuspended sediments may persist after dredging which could result in elevated levels beyond those in the current permit. Coagulants will be used to expedite the process of settling to the maximum extent possible. However, use of the intake water possibly with elevated PCB concentrations from the harbor may affect the levels of PCBs discharged through outfalls 001, 006, 007 and 014.

Section 121(d) of the Superfund Amendments and Reauthorization Act (SARA) requires remedial activities to be conducted in accordance with applicable, relevant and appropriate requirements (ARAR's) of other Federal and State environmental laws. "Applicable" requirements are those where the remedial action satisfies all of the jurisdictional prerequisites of said law or regulation. "Relevant and appropriate" requirements mean those standards which, while not "applicable" address problems or situations sufficiently similar to those encountered at the site that their use is well-suited.

The standards required under the NPDES permitting process are considered ARAR's in accordance with Section 121(d). Implementation of remedial activities under this Decree must attain these standards at the completion of the Remedial Action. Section 121(e) of SARA provides that no federal, state, or local permit shall be required for the portion of any removal or remedial action conducted entirely on site. The discharges from the outfalls in question at the site are considered "on-site" within the meaning of

NORTH SHORE SANITARY DISTRICT



Approximate Scale 1cm = 60.0m

HI 1 - Water Intakes
 NCCW - Non-Contact Cooling Water
 SW - Storm Water
 CW - Cooling Water

Water Intakes.

HI 1	0.8MGD
HI 2	1.3MGD
MUNICIPAL	1.02MGD
TOTAL	3.12MGD

Discharges (Flows for Dry Weather)

001	NCCW + SW	0.31MGD	006	CW	0.35MG
002	SW		007	NCCW + SW	1.21MG
003	SW		014	NCCW + SW	0.34MG
004	SW		015		
005	SW		016		

TABLE I

CALCULATED LOADS FOR OMC PLANT
CURRENT NPDES PERMIT vs. MODIFIED NPDES PERMIT *

<u>Outfall</u>	<u>Discharge Point</u>	<u>Yearly Flow Million Gal.</u>	<u>Lbs. PCBs Current NPDES Limit (1ppb)</u>	<u>Lbs. PCBs Modified NPDES Permit (5ppb)**</u>
001	Harbor	112.7	.94 lbs.	4.7 lbs.
006	Harbor	126.6	1.055	5.275
007	L. Mich.	442.5	3.69	3.69
014	N. Ditch	124.7	1.04	5.2
015	N. Ditch	1.12	.014	.07
016	N. Ditch	1.76	.015	.075
			<u>6.754</u>	<u>19.01</u>
Total Would be less than			<u>6.8 lbs./yr</u>	<u>/yr</u>

* Assumes limit is reached daily.

** Except Outfall 007 which remains at 1ppb.